

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An isolated nucleic acid molecule comprising a nucleic acid molecule isolated from coffee encoding at least one enzyme that hydrolyzes polysaccharides having pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage, wherein the enzyme is a peptide comprising at least one of the following sequences: SEQ ID NO:2, ~~SEQ ID NO:8, SEQ ID NO:9 or SEQ ID NO:10.~~

2-3. (Cancelled)

4. (Previously Presented) A fragment of an isolated nucleic acid molecule from coffee encoding at least one enzyme that hydrolyzes polysaccharides comprising pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage, comprising nucleotides 11 to 1294 of the nucleic acid sequence SEQ ID NO:1.

5. (Previously Presented) The nucleic acid molecule according to Claim 4, comprising the nucleic acid sequence SEQ ID NO:1.

6. (Previously Presented) An isolated nucleic acid molecule having at least 90% homology with nucleic acid sequence SEQ ID NO:1, wherein the nucleic acid molecule is isolated from coffee and encodes at least one enzyme that hydrolyzes polysaccharides having pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage.

7. (Currently Amended) A recombinant vector comprising an isolated nucleic acid molecule that encodes at least one enzyme that hydrolyzes polysaccharides having pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage, wherein the enzyme is a peptide comprising SEQ ID NO:2, ~~SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10.~~

8. (Cancelled)

9. (Currently Amended) A plant cell comprising an isolated nucleic acid molecule, or fragment thereof, encoding at least one enzyme that hydrolyzes polysaccharides comprising a pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage, wherein the enzyme is a peptide comprising SEQ ID NO:2, ~~SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10~~ and the isolated nucleic acid molecule, or fragment thereof is integrated into the plant cell genome.

10. (Cancelled)

11. (Original) The plant cell according to Claim 9, specifically as a coffee cell.

12. (Original) A plant or seed comprising plant cells according to Claim 9.

13. (Currently Amended) A microorganism comprising an isolated nucleic acid molecule, or fragment thereof, encoding at least one enzyme that hydrolyzes polysaccharides comprising pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage, wherein the enzyme is a peptide comprising SEQ ID NO:2, ~~SEQ ID NO:8, SEQ ID NO:9, or SEQ ID NO:10~~ and the isolated nucleic acid molecule, or fragment thereof is integrated into the genome or plasmid of said microorganism.

14. (Previously Presented) The microorganism according to Claim 13, wherein the isolated nucleic acid molecule has at least 90% homology with SEQ ID NO:1 .

15. (Currently Amended) A dietary[[,]] ~~or cosmetic or pharmaceutical~~ composition that includes a fragment according to Claim 4, or an isolated nucleic acid molecule that encodes at least one enzyme that hydrolyzes polysaccharides having pure or branched mannan molecules linked to each other via a β (1 \rightarrow 4) linkage, wherein the enzyme is a peptide comprising SEQ ID NO:2 ~~or SEQ ID NO:8, SEQ ID NO:9 and SEQ ID NO:10.~~

16-18. (Cancelled)

19. (Previously Presented) The nucleic acid molecule of Claim 1, wherein the nucleic acid molecule has at least 90% homology with SEQ ID NO:1.

20. (Previously Presented) The nucleic acid molecule of Claim 19, wherein the nucleic acid molecule is SEQ ID NO:1 or nucleotides 11 to 1294 of the nucleic acid sequence SEQ ID NO:1.

21. (Previously Presented) The nucleic acid molecule of Claim 6, wherein the nucleic acid molecule is SEQ ID NO:1 or nucleotides 11 to 1294 of the nucleic acid sequence SEQ ID NO:1.

22. (Previously Presented) A recombinant vector comprising an isolated nucleic acid molecule according to Claim 6.

23. (Previously Presented) A plant cell or microorganism comprising an isolated nucleic acid molecule according to Claim 6.

24. (Previously Presented) The cell of Claim 23, wherein the cell is a coffee cell.

25. (Previously Presented) A dietary, cosmetic or pharmaceutical composition that includes a nucleic acid molecule according to Claim 6.

26. (Previously Presented) The recombinant vector of Claim 7, wherein the nucleic acid molecule is SEQ ID NO:1 or nucleotides 11 to 1294 of the nucleic acid sequence SEQ ID NO:1.

27. (Previously Presented) The microorganism of Claim 14, wherein the nucleic acid molecule is SEQ ID NO:1 or nucleotides 11 to 1294 of the nucleic acid sequence SEQ ID NO:1.